

# Department of Civil & Environmental Engineering Newsletter

## OPEN HOUSE AND ALUMNI RECEPTION March 5, 2004

Open House 3:00-5:00 p.m. - Visit us in SB2 and tour labs and research areas where faculty and students will be on hand to explain their research and answer questions about the program. Areas include ITS, STAR, Environmental, Geotechnical, Hydraulics, and Environmental Modeling. The ASCE Student Group will also be showing their '04 steel bridge and concrete canoe designs.

Alumni Reception 5:00-7:00 p.m. - Alumni and friends are cordially invited to attend a reception in Smith Center following the open house. Hors d'oeuvres and beverages will be served.

## Grants - \$1M Earthquake Award

**Franz Rad** (CEE) and **Suresh Singh** (CS) recently received a 4-year, \$1 million grant from the National Science Foundation to develop new technology for rescuing trapped survivors within a collapsed building. Their approach calls for development of small, low-power, Ultra Wideband sensors that would be part of the building when it is constructed.



These sensors would come alive after the building collapses and immediately look for signs of survivors, detect the structural integrity of their surroundings, and then cooperatively form an ad hoc network to send this information to the surface where software would fuse the data together to

produce an internal three dimensional view of the ruin. A University of Washington faculty is also involved.

## Faculty Focus

Dr. **Mike Gorji** was selected by students last spring for the 2003 CEE Faculty Teaching Award. He is currently teaching Indeterminate Structures and Structural Dynamics, and will be offering Cold-Form Steel Design this spring.



Dr. Gorji's area of specialty is structural mechanics. His research deals with the theoretical prediction of the behavior of fiber-reinforced composite materials subject to various loading and environmental conditions.

## Message from the Chair



Fall 2003 was an extremely busy term for the CEE Department. Our entering Junior class is composed of about 45 students (compared to about 25 for Fall 2002); we have made Departmental curriculum changes (look for 2 new required classes for the BS degree: "Civil and Environmental Engineering

Materials" and "The Civil and Environmental Engineering Profession"); and we continue to work on increasing the quality of our classes by mapping educational outcomes of all our lectures and class assignments in preparation for the accreditation visit in Fall 2005. Students will be required to have a minimum of C- in any required CEE class to graduate from PSU with a BSCE degree. We look forward to seeing you back on campus for our Alumni event March 5!

## Faculty/Staff News

Dr. **Kent Lall** was awarded the coveted "Hind Rattan" Award in January. The award (which translates as "the jewel of India") was presented to Dr. Lall as part of the Republic Day celebrations in Delhi in January.

A retirement party was given in honor of **Steve Speer** (below, second from right) in early November. Steve has been the CEE Technician since 1975, and is looking forward to enjoying his new house east of the mountains. **Andrew Drexler**, the new Technician for the department started on January 15, 2004.



Recent faculty presentations include:

- \* **Rob Annear, Chris Berger, and Scott Wells** presented a paper at the Pacific Northwest Regional Water Quality Program in October 2003 in Boise, Idaho.
- \* **Gwynn Johnson** presented a session at the Geological Society of America's annual meeting in Seattle in November.
- \* **Rob Annear and Scott Wells** presented a paper at the American Institute of Hydrology Annual meeting in October 2003 in Atlanta, Georgia.
- \* **Rob Bertini** presented two papers at the IEEE 6<sup>th</sup> Annual Conference on Intelligent Transportation Systems in China in October 2003.

- \* **Franz Rad** was invited to moderate a panel discussion at the Western State Seismic Safety Council Annual meeting in September 2003, held in Portland.
- \* **Rob Bertini** presented an invited talk at the University of California at Berkeley's Institute of Transportation Studies on September 26, 2003.
- \* **Scott Wells** presented a series of seminars regarding modeling the Dead Sea at the Geologic Survey of Israel in Jerusalem in September 2003.
- \* **Rob Bertini** presented a paper with graduate student Shazia Malik and Christopher Monsere of ODOT at the Institute of Transportation Engineers 2003 Annual Meeting in Seattle.
- \* **Mike McKillip, Rob Annear, Bill Fish and Scott Wells** presented posters at the American Geophysical Union fall meeting in San Francisco in December.



- o The Steel Bridge and Concrete Canoe teams are working hard on their 2004 designs. Rob Van Dyke is the Steel Bridge captain and Violet Gordon is the Concrete Canoe captain.

To keep up on the many ASCE events coming up, check their Website at: [www.asce.pdx.edu](http://www.asce.pdx.edu).

### Student News

ASCE has been very active this year. President Kate Elliott communicates ongoing activities to members to keep them engaged with all the events. Fall 2003 highlights include:

- o Habitat for Humanity – ASCE worked on a fourteen- home community in NE Portland in October and November. They plan to stay involved in this construction throughout the year.
- o There have been several presentations to the group, including one by Chris Pangilinan about his experience on the “Big Dig” project in Boston last summer.
- o ASCE participated in the annual ASCE-Oregon Host-a-Student dinner in November, which was a great networking opportunity for CEE students. Students met with several hundred professional engineers during this event.

### Maseeh Fellowship

Ph.D. student **Mike McKillip** is the recipient of the 2003-2004 Maseeh Fellowship. This generous award offers a tuition remission and a monthly stipend. Mike started his doctorate program in Environmental Engineering in the Fall of 2003.

### UPCOMING EVENTS

**JANUARY 30, 2004 ARTHUR M. JAMES PROFESSORSHIP LECTURE - DR. FRANZ RAD  
HOFFMANN HALL 5:30-7:30PM**

**MARCH 5, 2004 CEE OPEN HOUSE AND ALUMNI RECEPTION (AND ASCE SILENT AUCTION), 5-7PM**

### Alumni Profile

**Melissa O'Meara** (MSCE Spring 2003) and **Travis McFeron** (MSCE Spring 2001) were active ASCE students while at PSU, and were in the top of their class. They both worked for Dr. Wendelin Mueller in the Seismic Testing and Applied Research (STAR) Lab, collaborating with his research team on various projects. After graduation, Melissa and Travis went to work for Peterson Structural Engineering, Inc. Most recently, the Department recruited these top-notch grads to teach CE 421/521 Analysis of Framed Structures, and did a great job. Thank you for your continued participation in our program!

*We want to hear from you! What have you been doing since you graduated? Contact us at [ceedept@cecs.pdx.edu](mailto:ceedept@cecs.pdx.edu) and keep us posted.*



### Faculty research grants Fall 2003

Faculty	Title (shortened)	Sponsor	Amount
R. Bertini	Mining Data	NSF	\$15,000
	Crash Reduction	ODOT	\$60,000
W. Mueller	Test Floor Design	OMI	\$13,100
F. Rad, S. Singh	Earthquake Rescue	NSF	\$1,000,000
S. Wells	Lake Roosevelt	Spokane Tribe	\$96,000
	Bull Run Reservoir	City of Portland	\$9,000
Fish/Johnson	Metals in Soil	OR Dept Ag	\$212,945

### DONORS FALL 2003

Donors to CEE for September 2003 through December 2003 include Robert & Sandra Galait, Scott & Leah Wells and Gary A. Sick. Thank you for your support!

### HOW TO DONATE TO CEE

A check payable to “PSU Foundation-CEE” can be mailed to: Portland State University Foundation, P.O. Box 243, Portland, OR 97207-0243. If specified for CEE, money will be used to directly support CEE students, labs, etc.